



SUBSTITUTE SEQUENCE LISTING

<110> Ottawa Health Research Institute

<120> Diabetogenic Epitopes

<130> 034205.003

<150> PCT/CA05/00025

<151> 2005-01-10

<150> US 60/535,278

<151> 2004-01-09

<160> 52

<170> PatentIn version 3.3

<210> 1

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Diabetogenic epitope from gliadin protein isoforms or Glb1 based on wheat protein

<400> 1

Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln  
1 5 10

<210> 2

<211> 9

<212> PRT

<213> Unknown

<220>

<223> Tryptic peptide of wheat storage globulin

<400> 2

Val Ala Ile Met Glu Val Asn Pro Arg  
1 5

<210> 3

<211> 2018

<212> DNA

<213> Unknown

<220>

<223> Wheat gene

<400> 3

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cttcagcggg gcggtgcagcg gtgccagcag gaccggccgc ggtactctca tgcccgggtgc 180  
gtgcaggagt gccgggacga ccagcagcag cacggaaggc acgagcagga ggagcagggc 240

cgcgggcatg gccggcacgg cgagggggag cgtgaggagg agcagggccg tggccgtggg	300
cggcgcgggc agggagagcg tgaggaggag cagggccgtg gacgtgggcg gcgcggcgag	360
ggagagcgtg atgaggagca cggggatggc cggcgggcgt acgtgttcgg cccgcgcagc	420
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tcggatgagc ggctgggtag tctcttgggc agccgccaag gcaaggagga ggaggagaag	900
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gagggtgacc agggccacca ctggcctctc ccccgttcc gcggcgactc gcgcgacacc	1020
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aacgccgaga ggaacgagcg ggtgtggctc gccgggagga acaacgtgat cgccaagctg	1560
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gagctggagc ccgtgccatt tgagagctga acttgatatgt gtgtgtaagt ttgtcagtac	1860
gcgggagtag cataaataag tcgtggcacg ggctcagtac gatgatgtaa gttgcgtacc	1920
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ttcagtaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	2018

<210> 4  
 <211> 588  
 <212> PRT  
 <213> Unknown

<220>

<223> WP5212 wheat protein sequence

<400> 4

Met Ala Thr Arg Gly Arg Ala Thr Ile Pro Leu Leu Phe Leu Leu Gly  
1 5 10 15

Thr Ser Leu Leu Phe Ala Ala Ala Val Ser Ala Ser His Asp Glu Glu  
20 25 30

Glu Asp Arg Arg Gly Gly Arg Ser Leu Gln Arg Cys Val Gln Arg Cys  
35 40 45

Gln Gln Asp Arg Pro Arg Tyr Ser His Ala Arg Cys Val Gln Glu Cys  
50 55 60

Arg Asp Asp Gln Gln Gln His Gly Arg His Glu Gln Glu Glu Gln Gly  
65 70 75 80

Arg Gly His Gly Arg His Gly Glu Gly Glu Arg Glu Glu Glu Gln Gly  
85 90 95

Arg Gly Arg Gly Arg Arg Gly Gln Gly Glu Arg Glu Glu Glu Gln Gly  
100 105 110

Arg Gly Arg Gly Arg Arg Gly Glu Gly Glu Arg Asp Glu Glu His Gly  
115 120 125

Asp Gly Arg Arg Pro Tyr Val Phe Gly Pro Arg Ser Phe Arg Arg Ile  
130 135 140

Ile Arg Ser Asp His Gly Phe Val Lys Ala Leu Arg Pro Phe Asp Glu  
145 150 155 160

Val Ser Arg Leu Leu Arg Gly Ile Arg Asn Tyr Arg Val Ala Ile Met  
165 170 175

Glu Val Asn Pro Arg Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp  
180 185 190

Gly Val Gly Tyr Val Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu  
195 200 205

Asn Gly Glu Lys Arg Ser Tyr Thr Val Arg Gln Gly Asp Val Ile Val  
210 215 220

Ala Pro Ala Gly Ser Ile Met His Leu Ala Asn Thr Asp Gly Arg Arg  
225 230 235 240

Lys Leu Val Ile Ala Lys Ile Leu His Thr Ile Ser Val Pro Gly Lys  
 245 250 255  
 Phe Gln Tyr Phe Ser Ala Lys Pro Leu Leu Ala Ser Leu Ser Lys Arg  
 260 265 270  
 Val Leu Thr Ala Ala Leu Lys Thr Ser Asp Glu Arg Leu Gly Ser Leu  
 275 280 285  
 Leu Gly Ser Arg Gln Gly Lys Glu Glu Glu Glu Lys Ser Ile Ser Ile  
 290 295 300  
 Val Arg Ala Ser Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Ala Ser  
 305 310 315 320  
 Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe Arg Gly Asp  
 325 330 335  
 Ser Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn  
 340 345 350  
 Arg His Gly Arg Leu Tyr Glu Ala Asp Ala Arg Ser Phe His Ala Leu  
 355 360 365  
 Ala Gln His Asp Val Arg Val Ala Val Ala Asn Ile Thr Pro Gly Ser  
 370 375 380  
 Met Thr Ala Pro Tyr Leu Asn Thr Gln Ser Phe Lys Leu Ala Val Val  
 385 390 395 400  
 Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro His Leu Gly Arg  
 405 410 415  
 Asp Ser Glu Arg Arg Glu Gln Glu His Gly Lys Gly Arg Trp Arg Ser  
 420 425 430  
 Glu Glu Glu Glu Asp Asp Arg Arg Gln Gln Arg Arg Arg Gly Ser Gly  
 435 440 445  
 Ser Glu Ser Glu Glu Glu Gln Asp Gln Gln Arg Tyr Glu Thr Val Arg  
 450 455 460  
 Ala Arg Val Ser Arg Gly Ser Ala Phe Val Val Pro Pro Gly His Pro  
 465 470 475 480  
 Val Val Glu Ile Ala Ser Ser Arg Gly Ser Ser Asn Leu Gln Val Val  
 485 490 495

Cys Phe Glu Ile Asn Ala Glu Arg Asn Glu Arg Val Trp Leu Ala Gly  
500 505 510

Arg Asn Asn Val Ile Ala Lys Leu Asp Asp Pro Ala Gln Glu Leu Ala  
515 520 525

Phe Gly Arg Pro Ala Arg Glu Val Gln Glu Val Phe Arg Ala Lys Asp  
530 535 540

Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu His  
545 550 555 560

Glu Arg Gly Asp Arg Arg Arg Gly Asp Arg Gly Arg Gly Asp Glu Ala  
565 570 575

Val Glu Ala Phe Leu Arg Met Ala Thr Ala Ala Leu  
580 585

<210> 5  
<211> 291  
<212> PRT  
<213> Unknown

<220>  
<223> Alpha/beta-gliadin A-II precursor of wheat protein

<400> 5

Met Lys Thr Phe Pro Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr  
1 5 10 15

Ala Thr Thr Ala Val Arg Val Pro Val Pro Gln Leu Gln Leu Gln Asn  
20 25 30

Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Glu Gln  
35 40 45

Gln Phe Gln Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro  
50 55 60

Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro  
65 70 75 80

Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro  
85 90 95

Gln Gln Pro Tyr Pro Gln Pro Gln Pro Gln Tyr Ser Gln Pro Gln Gln  
100 105 110

Pro Ile Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln  
115 120 125

Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu Ile Pro Cys Arg  
130 135 140

Asp Val Val Leu Gln Gln His Asn Ile Ala His Gly Ser Ser Gln Val  
145 150 155 160

Leu Gln Glu Ser Thr Tyr Gln Leu Val Gln Gln Leu Cys Cys Gln Gln  
165 170 175

Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala Ile His Asn Val  
180 185 190

Val His Ala Ile Ile Leu His Gln Gln His His His His Gln Gln Gln  
195 200 205

Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln  
210 215 220

Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Phe Phe Gln Pro Ser Gln  
225 230 235 240

Gln Asn Pro Gln Ala Gln Gly Ser Phe Gln Pro Gln Gln Leu Pro Gln  
245 250 255

Phe Glu Glu Ile Arg Asn Leu Ala Leu Gln Thr Leu Pro Ala Met Cys  
260 265 270

Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Phe Gly Ile Phe  
275 280 285

Gly Thr Asn  
290

<210> 6  
<211> 307  
<212> PRT  
<213> Unknown

<220>  
<223> Alpha/beta-gliadin MM1 precursor of wheat protein

<400> 6

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1 5 10 15

Ala Arg Ile Ala Val Arg Val Pro Val Pro Gln Leu Gln Pro Gln Asn  
20 25 30

Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Gln Gln  
35 40 45

Gln Phe Pro Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro  
 50 55 60

Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro  
 65 70 75 80

Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Leu Pro Tyr Pro  
 85 90 95

Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro Gln Gln  
 100 105 110

Pro Tyr Pro Gln Ser Gln Pro Gln Tyr Ser Gln Pro Gln Gln Pro Ile  
 115 120 125

Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Lys Gln Gln  
 130 135 140

Gln Gln Gln Gln Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu  
 145 150 155 160

Ile Pro Cys Arg Asp Val Val Leu Gln Gln His Ser Ile Ala Tyr Gly  
 165 170 175

Ser Ser Gln Val Leu Gln Gln Ser Thr Tyr Gln Leu Val Gln Gln Leu  
 180 185 190

Cys Cys Gln Gln Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala  
 195 200 205

Ile His Asn Val Val His Ala Ile Ile Leu His Gln Gln Gln Gln Gln  
 210 215 220

Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln  
 225 230 235 240

Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Ser Phe Gln Pro Ser Gln  
 245 250 255

Gln Asn Pro Gln Ala Gln Gly Ser Val Gln Pro Gln Gln Leu Pro Gln  
 260 265 270

Phe Glu Glu Ile Arg Asn Leu Ala Leu Glu Thr Leu Pro Ala Met Cys  
 275 280 285

Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Val Gly Ile Phe  
 290 295 300

Gly Thr Asn  
305

<210> 7  
<211> 327  
<212> PRT  
<213> Triticum aestivum  
  
<400> 7

Met Lys Thr Leu Leu Ile Leu Thr Ile Leu Ala Met Ala Ile Thr Ile  
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Gly Thr Ala Asn Ile Gln Val Asp Pro Ser Gly Gln Val Gln Trp Leu  
20 25 30

Gln Gln Gln Leu Val Pro Gln Leu Gln Gln Pro Leu Ser Gln Gln Pro  
35 40 45

Gln Gln Thr Phe Pro Gln Pro Gln Gln Thr Phe Pro His Gln Pro Gln  
50 55 60

Gln Gln Val Pro Gln Pro Gln Gln Pro Gln Gln Pro Phe Leu Gln Pro  
65 70 75 80

Gln Gln Pro Phe Pro Gln Gln Pro Gln Gln Pro Phe Pro Gln Thr Gln  
85 90 95

Gln Pro Gln Gln Pro Phe Pro Gln Gln Pro Gln Gln Pro Phe Pro Gln  
100 105 110

Thr Gln Gln Pro Gln Gln Pro Phe Pro Gln Gln Pro Gln Gln Pro Phe  
115 120 125

Pro Gln Thr Gln Gln Pro Gln Gln Pro Phe Pro Gln Leu Gln Gln Pro  
130 135 140

Gln Gln Pro Phe Pro Gln Pro Gln Gln Gln Leu Pro Gln Pro Gln Gln  
145 150 155 160

Pro Gln Gln Ser Phe Pro Gln Gln Gln Arg Pro Phe Ile Gln Pro Ser  
165 170 175

Leu Gln Gln Gln Leu Asn Pro Cys Lys Asn Ile Leu Leu Gln Gln Cys  
180 185 190

Lys Pro Ala Ser Leu Val Ser Ser Leu Trp Ser Ile Ile Trp Pro Gln  
195 200 205

Ser Asp Cys Gln Val Met Arg Gln Gln Cys Cys Gln Gln Leu Ala Gln



210                      215                      220  
 Ile Pro Gln Gln Leu Gln Cys Ala Ala Ile His Ser Val Val His Ser  
 225                      230                      235                      240  
 Ile Ile Met Gln Gln Gln Gln Gln Gln Gln Gln Gln Gly Met His  
 245                      250                      255  
 Ile Phe Leu Pro Leu Ser Gln Gln Gln Gln Val Gly Gln Gly Ser Leu  
 260                      265                      270  
 Val Gln Gly Gln Gly Ile Ile Gln Pro Gln Gln Pro Ala Gln Leu Glu  
 275                      280                      285  
 Ala Ile Arg Ser Leu Val Leu Gln Thr Leu Pro Ser Met Cys Asn Val  
 290                      295                      300  
 Tyr Val Pro Pro Glu Cys Ser Ile Met Arg Ala Pro Phe Ala Ser Ile  
 305                      310                      315                      320  
 Val Ala Gly Ile Gly Gly Gln  
 325

<210> 8  
 <211> 302  
 <212> PRT  
 <213> Triticum aestivum  
 <400> 8

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 Ala Thr Ala Asn Met Gln Val Asp Pro Ser Gly Gln Val Gln Trp Pro  
 20                      25                      30  
 Gln Gln Gln Pro Phe Pro Gln Pro Gln Gln Pro Phe Cys Gln Gln Pro  
 35                      40                      45  
 Gln Gln Thr Ile Pro Gln Pro His Gln Thr Phe His His Gln Pro Gln  
 50                      55                      60  
 Gln Thr Phe Pro Gln Pro Gln Gln Thr Tyr Pro His Gln Pro Gln Gln  
 65                      70                      75                      80  
 Gln Phe Pro Gln Thr Gln Gln Pro Gln Gln Pro Phe Pro Gln Pro Gln  
 85                      90                      95  
 Gln Thr Phe Pro Gln Gln Pro Gln Leu Pro Phe Pro Gln Gln Pro Gln  
 100                      105                      110

Gln Pro Phe Pro Gln Pro Gln Gln Pro Gln Gln Pro Phe Pro Gln Ser  
 115 120 125

Gln Gln Pro Gln Gln Pro Phe Pro Gln Pro Gln Gln Gln Phe Pro Gln  
 130 135 140

Pro Gln Gln Pro Gln Gln Ser Phe Pro Gln Gln Gln Gln Pro Ala Ile  
 145 150 155 160

Gln Ser Phe Leu Gln Gln Gln Met Asn Pro Cys Lys Asn Phe Leu Leu  
 165 170 175

Gln Gln Cys Asn His Val Ser Leu Val Ser Ser Leu Val Ser Ile Ile  
 180 185 190

Leu Pro Arg Ser Asp Cys Gln Val Met Gln Gln Gln Cys Cys Gln Gln  
 195 200 205

Leu Ala Gln Ile Pro Gln Gln Leu Gln Cys Ala Ala Ile His Ser Val  
 210 215 220

Ala His Ser Ile Ile Met Gln Gln Glu Gln Gln Gln Gly Val Pro Ile  
 225 230 235 240

Leu Arg Pro Leu Phe Gln Leu Ala Gln Gly Leu Gly Ile Ile Gln Pro  
 245 250 255

Gln Gln Pro Ala Gln Leu Glu Gly Ile Arg Ser Leu Val Leu Lys Thr  
 260 265 270

Leu Pro Thr Met Cys Asn Val Tyr Val Pro Pro Asp Cys Ser Thr Ile  
 275 280 285

Asn Ile Pro Tyr Ala Asn Ile Asp Ala Gly Ile Gly Gly Gln  
 290 295 300

<210> 9  
 <211> 20  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Diabetogenic epitope homopolymer based on wheat protein  
 <400> 9

Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Glu Glu Gln Leu Arg Glu  
 1 5 10 15

Leu Arg Arg Gln  
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<210> 10  
<211> 18  
<212> DNA  
<213> Artificial

<220>  
<223> Forward primer for WP5212 wheat gene

<400> 10  
accacgggtt cgtcaagg

18

<210> 11  
<211> 18  
<212> DNA  
<213> Artificial

<220>  
<223> Reverse primer for WP5212 wheat gene

<400> 11  
aacacctcct gcacctcc

18

<210> 12  
<211> 16  
<212> PRT  
<213> Artificial

<220>  
<223> Antigenic WP5212 peptide based on wheat protein

<400> 12

Cys Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn  
1 5 10 15

<210> 13  
<211> 15  
<212> PRT  
<213> Artificial

<220>  
<223> Antigenic WP5212 peptide based on wheat protein

<400> 13

Arg Gly Asp Glu Ala Val Glu Ala Phe Leu Arg Met Ala Thr Ala  
1 5 10 15

<210> 14  
<211> 8  
<212> PRT  
<213> Unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 14

Arg Pro Tyr Val Phe Gly Pro Arg

1 5

<210> 15  
<211> 9  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 15

Val Ala Ile Met Glu Val Asn Pro Arg  
1 5

<210> 16  
<211> 17  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 16

Ala Gln Asp Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Ser  
1 5 10 15

Arg

<210> 17  
<211> 15  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 17

Phe Gln Phe Leu Ser Val Lys Pro Leu Leu Ala Ser Leu Ser Lys  
1 5 10 15

<210> 18  
<211> 14  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 18

Gly Ser Glu Ser Glu Ser Glu Glu Glu Glu Glu Gln Gln Arg  
1 5 10

<210> 19  
<211> 15

<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 19

Leu Gly Ser Pro Ala Gln Glu Leu Thr Phe Gly Arg Pro Ala Arg  
1 5 10 15

<210> 20  
<211> 11  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 20

Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys  
1 5 10

<210> 21  
<211> 11  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 21

Ser Phe His Ala Leu Ala Asn Gln Asp Val Arg  
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<210> 22  
<211> 11  
<212> PRT  
<213> unknown

<220>  
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<400> 22

Gly Gly His Ser Leu Gln Gln Cys Val Gln Arg  
1 5 10

<210> 23  
<211> 10  
<212> PRT  
<213> unknown

<220>  
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<400> 23

Ala Leu Arg Pro Phe Asp Gln Val Ser Arg

1 5 10

<210> 24  
 <211> 10  
 <212> PRT  
 <213> unknown

<220>  
 <223> Tryptic peptide of wheat protein

<400> 24

Ile Ile Gln Ser Asp His Gly Phe Val Arg  
 1 5 10

<210> 25  
 <211> 9  
 <212> PRT  
 <213> unknown

<220>  
 <223> Tryptic peptide of wheat protein

<400> 25

His Glu Gln Glu Glu Glu Gln Gly Arg  
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<210> 26  
 <211> 10  
 <212> PRT  
 <213> unknown

<220>  
 <223> Tryptic peptide of wheat protein

<400> 26

Gly Asp Glu Ala Val Glu Thr Phe Leu Arg  
 1 5 10

<210> 27  
 <211> 8  
 <212> PRT  
 <213> unknown

<220>  
 <223> Tryptic peptide of wheat protein

<400> 27

Glu Gln Glu Gln Glu Gln Glu Arg  
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<210> 28  
 <211> 10  
 <212> PRT  
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<220>

<223> Tryptic peptide of wheat protein

<400> 28

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1 5 10

<210> 29

<211> 8

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 29

Glu Glu Glu Glu Asp Asp Gln Arg  
1 5

<210> 30

<211> 10

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 30

Glu Ala Ala Glu Gly Gly Gln Gly His Arg  
1 5 10

<210> 31

<211> 8

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 31

Asp Asp Gln Gln Gln His Gly Arg  
1 5

<210> 32

<211> 29

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 32

Ala Thr Ile Pro Leu Leu Phe Leu Leu Gly Thr Ser Leu Leu Phe Ala  
1 5 10 15

Ala Ala Val Ser Ala Ser His Asp Glu Glu Glu Asp Arg

20

25

<210> 33  
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<220>  
 <223> Tryptic peptide of wheat protein  
 <400> 33

Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp Gly Val Gly Tyr Val  
 1 5 10 15

Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu Asn Gly Glu Lys  
 20 25 30

<210> 34  
 <211> 22  
 <212> PRT  
 <213> unknown

<220>  
 <223> Tryptic peptide of wheat protein  
 <400> 34

Val Ala Val Ala Asn Ile Thr Pro Gly Ser Met Thr Ala Pro Tyr Leu  
 1 5 10 15

Asn Thr Gln Ser Phe Lys  
 20

<210> 35  
 <211> 21  
 <212> PRT  
 <213> unknown

<220>  
 <223> Tryptic peptide of wheat protein  
 <400> 35

Gln Gly Asp Val Ile Val Ala Pro Ala Gly Ser Ile Met His Leu Ala  
 1 5 10 15

Asn Thr Asp Gly Arg  
 20

<210> 36  
 <211> 20  
 <212> PRT  
 <213> unknown

<220>  
 <223> Tryptic peptide of wheat protein



<400> 36

Leu Ala Val Val Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro  
1 5 10 15

His Leu Gly Arg  
20

<210> 37

<211> 19

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 37

Gly Ser Ala Phe Val Val Pro Pro Gly His Pro Val Val Glu Ile Ala  
1 5 10 15

Ser Ser Arg

<210> 38

<211> 19

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 38

Asp Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu  
1 5 10 15

His Glu Arg

<210> 39

<211> 17

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 39

Gln Ala Ser Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe  
1 5 10 15

Arg

<210> 40

<211> 16  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 40

Gly	Ser	Ser	Asn	Leu	Gln	Val	Val	Cys	Phe	Glu	Ile	Asn	Ala	Glu	Arg
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<210> 41  
<211> 15  
<212> PRT  
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<220>  
<223> Tryptic peptide of wheat protein

<400> 41

Leu	Asp	Asp	Pro	Ala	Gln	Glu	Leu	Ala	Phe	Gly	Arg	Pro	Ala	Arg
1				5					10					15

<210> 42  
<211> 15  
<212> PRT  
<213> unknown

<220>  
<223> Tryptic peptide of wheat protein

<400> 42

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Leu Tyr Glu Ala Asp Ala Arg  
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